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Rhone-Poulenc Inc

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Voluntary Interim Measure Report Hazardous Waste Storage Area and Transformer A Area Cleanup

Former Rhone-Poulenc Site

Tukwila, Washington

Prepared for:

Davis Property & Investment

22757 72nd Avenue South

Kent, Washington 98032

August 2006

Project No. 8769



Geomatrix

FILE COPY

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22757 72nd Avenue South
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Prepared by:

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On behalf of the respondents, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to evaluate the information submitted. I certify that the information contained in or accompanying this Voluntary Interim Measure Report, Hazardous Waste Storage Area and Transformer A Area Cleanup is true, accurate, and complete. As to those portions of the report for which I cannot personally verify accuracy, I certify under penalty of law that this report and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who may manage the system, or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By: _____

Mr. Gary Dupuy, Project Coordinator

Date: _____

8/18/06




**VOLUNTARY INTERIM MEASURE REPORT
HAZARDOUS WASTE STORAGE AREA AND
TRANSFORMER A AREA CLEANUP**

Former Rhone-Poulenc Site
Tukwila, Washington

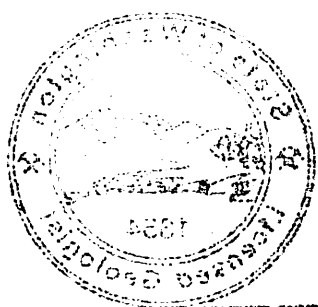
August 18, 2006
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This report was prepared by the staff of Geomatrix Consultants, Inc., under the supervision of the Washington Licensed Hydrogeologist whose seal and signature appear hereon.

The findings, recommendations, specifications, or professional opinions are presented within the limits described by the client, in accordance with generally accepted professional engineering and geologic practice. No warranty is expressed or implied.




8/18/2006
John Douglas Long

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John Douglas Long

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VOLUNTARY INTERIM MEASURE REPORT HAZARDOUS WASTE STORAGE AREA AND TRANSFORMER A AREA CLEANUP

Former Rhone-Poulenc East Marginal Way Facility
Tukwila, Washington

1.0 INTRODUCTION

The former Rhone-Poulenc facility (Site) is located along the Duwamish Waterway at 9229 East Marginal Way South, Tukwila, Washington. RCRA corrective action is being conducted under Administrative Order on Consent No. 1091-11-20-3008(h) (Order) between the Order Respondents Container Properties, L.L.C. (Container Properties); Bayer CropScience, and Rhodia, Inc. (Rhodia)), and the U.S. Environmental Protection Agency, Region 10 (EPA), dated March 31, 1993, as amended. Container Properties is the current owner of the Site.

1.1 BACKGROUND

Container Properties decided to proceed with redevelopment of the Site, which required demolition of existing above-ground structures on the property. Rushforth Construction began demolition in April 2006 and encountered an oil spill in the Transformer A Area and suspected waste materials near the former Hazardous Waste Storage Area (HWSA). The Transformer A Area is located on the East Parcel, close to the northwest corner of the former metal garage. The former HWSA is located near the northwest corner of the Western Parcel. These locations are shown on the Site Layout, Figure 1. Both cases have been reported to EPA and are being addressed under provisions 6.3 and 6.4 of the Order.

Initial written notification for the Transformer A Area and the HWSA were submitted to EPA on May 5 and on May 30, 2006, respectively (Geomatrix, 2006a,b). As stated in the notification letters, a report documenting the removal of wastes for each area will be submitted to EPA within 30 days of disposal or receipt of manifests, whichever is later. This report details the voluntary interim measures for the Transformer A Area and the HWSA.

2.0 TRANSFORMER A AREA

2.1 Field Investigation and Cleanup

Previously reported Transformer A Area activities are summarized in the bullets below with previously unreported activities detailed in the following text.

- On April 25, 2006, Geomatrix staff investigated discolored soil around Transformer A.
- On April 28, 2006, EPA verbally approved a plan for immediate excavation and confirmation sampling of the Transformer A Area. Geomatrix supervised the following work on that day.
 - Transformer A was removed from its slab and the slab was removed.
 - Transformer A was drained as part of demolition activities. It was reported that Transformer A contained approximately 75% of its oil capacity (263 gallons).
 - The spill area, to the west of Transformer A, was protected from disturbance while surrounding buildings were demolished and concrete slabs were removed.
 - Geomatrix supervised an initial excavation (approximately 8 feet by 12 feet and 1.5 feet deep) with collection of confirmation samples 1 to 6 (see Table 1 and Figure 1, Detail 1A). Samples were analyzed for NWTPH-HCID and PCBs. All samples were labeled with the date, time, sample number, and sampler's initials. All samples were then placed in an iced cooler and delivered to Analytical Resources, Inc. (ARI) for analysis under chain-of-custody procedures. Excavated soils were placed onto plastic sheeting and the pile was covered with plastic. The excavation was left open and marked off with caution tape.
 - The samples confirmed PCB concentrations were below the East Parcel unrestricted use soil preliminary remediation goal (PRG) of 1 mg/kg at all sampling locations. The PRGs are based on MTCA Method A unrestricted use cleanup levels. Samples from the West, South, and bottom of the excavation had TPH-D and TPH-O concentrations above the PRG of 2,000 mg/kg (see Table 1 for an analytical summary and Appendix A for the full analytical report).
- On May 4, 2006, the excavation was enlarged by approximately 6 feet west, 6 feet south and to a depth of 3.5 feet, based on confirmation sample results and visual indicators. Confirmation samples 7 to 9 were taken and were sent to ARI for analysis by NWTPH-D and NWTPH-O (see Table 1 and Figure 1, Detail 1A). PCB analysis was not requested because previous confirmation sampling had confirmed PCBs were below the total PCB PRG. Excavated soils were added to the existing

pile on plastic sheeting and the pile was covered with plastic. The expanded excavation was left open and marked off with caution tape.

- On May 5, 2006, Geomatrix reported Transformer A voluntary cleanup work in a written notification to the EPA which was required with 7 days of verbal reporting, as specified in Paragraph 6.3 of the Order (results from May 4, 2006, were not yet available).

Results from sampling on May 4, 2006, were received after transmission of the letter on May 5, 2006. Confirmation sample 9 (from the bottom of excavation) was still above the East Parcel PRG for TPH-D (Table 1), while results for Samples 7 and 8 were below the PRG. Therefore, an additional 2 feet of material were removed from the bottom of the northern half of the excavation on May 9, 2006 (Appendix B, Photo 1). An abandoned water line was broken during digging, resulting in a small amount of water draining into the excavation. The excavated soils were placed next to previously excavated Transformer A soils onto plastic sheeting and covered with plastic.

A final confirmation sample (sample 10) was taken from the bottom of the additional excavation on May 9, 2006 (Figure 1, detail 1A). Sample 10 was analyzed for NWTPH-D and NWTPH-O. Sample 10 contained TPH-D at a concentration of 1,200 mg/kg and TPH-O was not detected. These results are below the PRG for TPH-D and TPH-O (Table 1). The excavation was left open and marked off with caution tape, pending additional excavation work planned for the East Parcel.

2.2 Historic Records Investigation

Historic records for Transformer A were included in the letter report issued on May 5, 2006. These records included previous PCB testing showing less than 1 ppm of PCBs in the Transformer A oil.

2.3 Transformer A Area Cleanup and Waste Disposal

A composite sample was taken from the stockpile on April 28, 2006, in order to characterize the soil for disposal. As shown in Table 1, the characterization sample for the soil stockpile (sample 6) was below the PRG. As expected, the NWTPH results indicated that the stockpiled soil exceeded the PRG for TPH-D. Stockpiled soil remained covered until loaded for transport to an off-site disposal facility on July 20, 2006. Approximately 38 tons of Transformer A Area soil was removed for disposal (according to loading tickets). Geomatrix received a bill of lading on August 16, 2006 (Appendix C).

3.0 HAZARDOUS WASTE STORAGE AREA

3.1 Initial Field Investigation

On May 19, 2006, Geomatrix staff were notified by the Rushforth Construction's Site Superintendent that a small underground sump or catch basin with dark liquid had been found in the Western Parcel (Figure 1) during demolition of a concrete pad. Geomatrix staff observed that a 2- by 2-foot area with approximately 8 inches of dark liquid with an oily sheen had been uncovered when demolition crews removed a concrete slab overlying the sump (Appendix B, Photo 2). No solid bottom or sides could be confirmed visually. Photo Ionization Detector (PID) readings detected no volatile components immediately over the sump. One water sample, one sediment sample, and one soil sample from just above the north side of the sump were collected and analyzed for PCBs, SVOCs, Metals, and NWTPH- HCID to characterize the material within the sump or catch basin.

3.2 HWSA Historic Records

Historic documents/drawings indicate that the area was formerly used as a RCRA permitted HWSA (Appendix D). The HWSA received clean closure certification in 1992. The concrete pad removed from above the sump was apparently the HSWA pad. Drawings show the HWSA was originally built in March 1983, a roof was added in August 1986, and additional modifications to the sump trenching system were made in June 1987. This system included concrete berms and trenching that drained to a 1,300-gallon sump. Liquids were pumped from this 1,300-gallon sump to the plant's vanillin process system. Drawings have a note that reads "sump pump removed and filled." The sampled sump is very close to the location shown for a catch basin on the original construction drawings from March 2, 1983 for the storage pad. The identified structure does not appear to be the 1,300-gallon sump used to transfer materials to the vanillin process system; it appears to be the catch basin.

3.3 Analytical Results

Analytical results are summarized in Table 2. PCBs were not detected above the PRG in the water, sediment, and soil samples. TPH, SVOCs, and metals were detected in all three samples. TPH-Diesel was detected at a concentration of 1,100 mg/L in the water and up to 9,300 mg/kg in the soil and sediment samples. Laboratory reports are presented in Appendix E.

3.4 Final Field Investigation

Based on analytical results and historic records, Container Properties decided to implement a voluntary cleanup action for the HSWA sump. A final field investigation was performed on

May 30, 2006, in order to better define the extent of the affected area. A small excavator was used to remove soil immediately adjacent to the concrete sump structure. Care was taken to avoid mixing contaminated (dark stained) and clean (unstained) soil as little as possible. The top edge of a broken concrete cylinder, approximately 5 feet in diameter and with 3-inch-thick walls was uncovered to the south west of the initial dark pool of liquid, at a depth of 1.5 feet (Appendix B, Photo 3). The top edge of the cylinder was broken on the east and south sides, but otherwise the cylinder seemed intact. An estimated 2 feet of dark liquid with an oily sheen was pooled above sediment/concrete rubble inside the concrete cylinder.

The HWSA records indicated that a 1,300 gallon sump was located at the south west corner of the HWSA. Geomatrix staff located an approximate 9-foot by 5-foot concrete structure at this location. The 9-foot by 5-foot structure was filled with clean sand (Appendix B, Photo 4). The relative locations of this structure and the concrete cylinder confirmed that the cylinder was a catch basin for handling runoff in the vicinity of the HWSA.

3.5 HWSA Cleanup and Waste Disposal

On May 30, 2006, affected soil from the HWSA was excavated and placed next to Transformer A soil piles on top of plastic sheeting and covered with plastic. Approximately 2 cubic yards (about 2 tons) of darkly stained soil was removed from around the top of the concrete catch basin. Stockpiled soil remained covered until it was loaded for transport to an off-site disposal facility on July 20, 2006. Geomatrix received the manifests on August 16, 2006. These soils were disposed (jointly with Transformer A Area soils) at the Roosevelt Regional Landfill in Roosevelt, Washington, as shown by the bill of lading and loading tickets (Appendix C).

On June 1, 2006, Geomatrix staff supervised the removal of sediment and liquid from the HWSA concrete cylinder. Phillips Services Corporation (PSC, a subsidiary of Burlington Environmental, Inc.) provided a vacuum truck to remove the liquids and sediment inside the concrete cylinder. A small excavator was used to move concrete rubble and gravel inside the cylinder in order to create a low point inside the catch basin to facilitate liquid removal. The liquid and sediment was vacuumed out of the cylinder until it was empty. Liquid seeped back into the cylinder and refilled it over a period of minutes. The additional liquid was vacuumed out and the cylinder was allowed to refill repeatedly, until no liquids refilled the concrete cylinder (Appendix B, Photo 5). The total time for removal of sediment and liquids was approximately 1 hour. The excavator bucket was decontaminated with approximately 30 gallons of rinse water and was disposed of by PSC. Unstained soils scraped from the nearby

ground surface were used to backfill the sump (Appendix B, Photo 6). A total of 150 gallons of liquid/sediment was removed as per the manifests received on July 13, 2006 (Appendix C).

4.0 CONCLUSIONS

Based on the information presented in this report, the following conclusions are made.

- All of the soils that were affected by the Transformer A oil spill were removed and disposed of in accordance with all state and federal regulations.
- Soil sample analytical results from the sides and base of the Transformer A excavation were below the East Parcel unrestricted use preliminary remediation goals for TPH-Diesel, TPH-Motor Oil, and PCBs.
- All of the liquids in the HWSA catch basin were removed and disposed of in accordance with all state and federal regulations.
- The HWSA catch basin was filled with clean soil and remains intact within the barrier wall.

5.0 REFERENCES

Geomatrix Consultants, Inc. (Geomatrix), 2006a, Interim Remedial Action: Excavation of Contaminated Soil, Tukwila, Washington: Prepared for Davis Property & Investment, May 5.

Geomatrix 2006b, Drainage Sump, Former Hazardous Waste Storage Area, Tukwila, Washington: Prepared for Davis Property & Investment, May 30.